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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,462	04/12/2004	Joseph J. Kubler	14364US21	4632
23446	7590	08/22/2005	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			NGUYEN, BRIAN D	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/822,462	Applicant(s) KUBLER ET AL.	
	Examiner Brian D. Nguyen	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Note: The terms: "capable of" is not positively recited limitation. Therefore, the limitations followed this term are not considered the claimed limitations. If the applicant would like to claim the limitations; it is suggested that the applicant delete this term from the claims.

Specification

2. The applicant is requested to update the status of all the applications described in the specification.

Claim Objections

3. Claim 24 is objected to because of the following informalities:

Claim 24, line 2, it is suggested to change "a portion of the first voice data" to --said portion of the first voice data--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 22-23, 25-26, 29-31, 33-34, 36-38, 40-41, 44-46, 48-49, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto (5,812,944).

Regarding claim 22, Matsumoto discloses a circuit (30) for processing data representative of voice signals, the circuit having two signal paths comprising: in a first signal path, a queue

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(buffer 21) for storing first voice data representative of a first voice signal; and a digital to analog converter (23) having an output, the digital to analog converter for receiving the first voice data from the queue, the digital to analog converter converting the first voice data to a first analog representation of the first voice signal, and, in a second signal path, an analog to digital converter (12) having an input, the analog to digital converter for converting a second analog representation of a second voice signal to second voice data; and signal processing circuitry (subtract 28 is an element of the processing circuit) for removing from the second voice signal represented by the second voice data, a portion of the first voice signal representative of the first voice data (see figure 1).

Regarding claim 23, Matsumoto discloses the signal processing circuitry comprises a subtractor (28).

Regarding claim 25, Matsumoto discloses the portion removed comprises undesirable components of the first voice signal present in the second voice signal (the removed component is the echo).

Regarding claim 26, Matsumoto discloses at least one processor capable of processing received voice packets into the first voice data; and the at least one processor capable of processing the second voice data into transmit voice packets (see digital signal processor in col. 3, lines 41-45).

Regarding claim 29, Matsumoto discloses the circuit of further comprising: at least one signal coupling circuit for coupling voice signals from a two wire telephone network connection to the input of the analog to digital converter, and the at least one signal coupling circuit for

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coupling voice signals from the output of the digital to analog converter to the two wire telephone network connection (see A/D and D/A converters in figure).

Regarding claims 30-31, 33-34, and 36, claims 30-31, 33-34, and 36 are merely the method counterpart of circuit claims 22-23, 25-26, and 29 and include similar language.

Therefore, they are subject to the same rejection.

Regarding claims 37-38, 40-41, and 44, claims 37-38, 40-41, and 44 are merely the machine-readable medium counterpart of circuit claims 22-23, 25-26, and 29 and include similar language. Therefore, they are subject to the same rejection.

Regarding claims 45-46, 48-49 and 52, claims 45-46, 48-49, and 52 are merely the system counterpart of circuit claims 22-23, 25-26, and 29 and include similar language.

Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24, 32, 39, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Gysel et al (5,649,010).

Regarding claims 24, 32, 39, and 47, Matsumoto does not specifically disclose the signal processing circuit delays the voice data representative of the portion of the first voice data.

However, this feature is well known in the art. Gysel discloses the delaying (see the adaptive

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filter, AF of figure 3, with delay elements shown in figures 6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to delay the voice data as taught by Gysel in the system of Matsumoto to compensate for the D/A and A/D conversion times.

8. Claims 27-28, 35, 42-43, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Zhu et al (5,534,937).

Regarding claims 27-28, 35, 42-43, and 50-51, Matsumoto does not specifically disclose the operation of the queue is adjusted (variable) based on a rate of packet arrival or a propagation delay. However, these features are well known in the art. Zhu discloses these features (see variable queuing delay, for example, in col. 1, lines 14-25). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust the operation of the queue as taught by Zhu in the system of Matsumoto to prevent overflow and to ensure a constant playout of voice signal.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Asada et al (5,745,533) and Yoshida et al (5,699,423).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/16/05

BRIAN NGUYEN
PRIMARY EXAMINER